

Annual School Health Services Report

2019-20 School Year

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Introduction

The Tennessee Department of Education surveys public school systems annually to monitor compliance with state school health laws and to assess the scope of school health services provided to Tennessee public school students as mandated in T.C.A. § 49-50-1602.¹

In March 2020, Tennessee schools implemented building closure procedures in response to state and federal initial reports regarding the novel Coronavirus or COVID-19. The information in this report is reflective of those school building closures. More than ever before, the health of our children will require the expertise and resources school nurses provide.

Role of the School Nurse

Wellness issues of students are supervised by licensed school nurses with the goal to appraise, protect, and promote health needs. School nurses aim to increase student time in the classroom and decrease the time out of school. School nurses provide services such as assessment, planning, care-coordination, critical thinking skills, quality improvement, health education and promotion which benefit schools, families, and children with acute and chronic health conditions.

The school nurse has the responsibility of collaborating with and/or referring students to community health care professionals to:

- ensure early intervention for mental and physical health care needs;
- ensure access and referral to primary care services;
- foster appropriate use of primary health care services;
- prevent and control communicable diseases and other health problems;
- provide emergency care for students and staff illness and injury;
- provide daily and continuous services for children with special health care needs;
- promote and provide optimum sanitary conditions for a safe school facility and school environment;
 and
- provide education and counseling opportunities for promoting and maintaining individual, family, and community health.

2019-20 School Health Services Highlights

Student Diagnoses

During the 2019-20 school year, **208,899** students in Tennessee public schools had a chronic illness or disability diagnosis. Children diagnosed with chronic illnesses have healthcare needs that require daily management in addition to addressing possible emergencies. Some students with chronic health conditions may miss school more often than others, and this may have an impact on academic performance. (CDC, 2019a). Nurses help students stay at school, safely and ready to learn, while providing services and accommodations for students with chronic health conditions.

¹ One hundred and forty-five (145) local education agencies (LEAs) returned their survey for inclusion in this report.

Chronic Illness or Disability Diagnosis	Number of Students	Percent of Total
Asthma	91,500	43.8%
ADHD/ADD	38,314	18.34%
Severe Allergy	24,276	11.62%
Intellectual Disability	12,743	6.1%
Autism	11,302	5.41%
Mental Health	11,030	5.28%
Other (Cerebral Palsy, Sickle Cell, Cystic Fibrosis)	10,350	4.95%
Seizure Disorder	5,797	2.78%
Diabetes	3,366	1.61%
Adrenal Insufficiency	221	0.1%
Total	208,899	100%

The healthcare needs of students with chronic illness can be ongoing and complex and includes daily management and addressing potential emergencies. The conditions or disabilities highlighted below are the most prevalent chronic illnesses or disabilities in Tennessee public schools or require daily care management and may require rescue medication due to the potential for a life-threatening emergency related to the condition.

Asthma

Asthma is the leading chronic illness among students in Tennessee and a leading cause of school absenteeism (CDC, 2019b; Beavers, 2016; Health Schools Campaign, 2015). During the 2019-20 school year, **91,500** students were diagnosed with asthma. Asthma is a serious disease that affects the lungs. It can result in wheezing, difficulty breathing, and coughing. Ensuring students with asthma receive the support they need to effectively manage their medical condition is pivotal. The school nurse plays an important role in providing asthma management, enabling students to stay safe and attend school ready to learn.

The following data illustrates the need of increased school nurse availability, increased development of individual and school-level action plans for all diagnosed students, and increased asthma self-management education to diagnosed students.

	Percentage
Students diagnosed with asthma identified as having an individualized action treatment plan	32%
Students diagnosed with asthma who received asthma education	19%
Students diagnosed with asthma who have a prescribed emergency medication available at school	20%

During the 2019-20 school year, **48,874** teachers, coaches, and other school personnel received training in asthma education.

Attention Deficit Hyperactivity Disorder/Attention Deficit Disorder (ADHD/ADD)

ADHD/ADD is a common mental disorder that affects children. In the 2019-20 school year, **38,314** students were diagnosed with ADHD/ADD, making it the second most prevalent chronic condition or disability in Tennessee public schools. Students with ADHD/ADD experience more obstacles than the average student. Students with ADHD/ADD may experience trouble following directions, sitting still, and completing tasks at school (CDC, 2020). School nurses administer medication to students with ADHD/ADD and monitor for therapeutic response and side effects. Schools nurses also play an important role in early recognition and assessment of ADHD/ADD.

Severe Allergies

There were **24,276** students diagnosed with severe allergies in Tennessee public schools during the 2019-20 school year. The body's response to allergies can be life-threatening, such as anaphylaxis. School nurses play a critical role in the prevention and management of severe allergies. The number of staff members receiving education on the signs and symptoms of anaphylactic reactions and how to administer emergency medication continues to increase.

	2009-10	2019-20	Percent Change
Number of students who have Epi-Pens® available at schools	6,230	8,054	+29%
Number of students who required administration of the Epi-Pen®	95	300	+215%
Number of teachers/staff trained to administer an Epi-Pen® if needed	19,240	55,817	+190%

Of the **11,369** students with a provider order to administer an Epi-pen® at school, **70%** have an Epi-pen® available at school. Each school district is authorized to maintain epinephrine auto-injectors to be administered to any student believed to be having a life-threatening anaphylactic reaction. **80%** of school districts chose to maintain epinephrine auto-injectors for this purpose.

Seizure Disorders

There were **5,797** students in Tennessee public schools with a seizure disorder during the 2019-20 school year. For many students, seizure disorders can be controlled with medication. Although the prevalence of seizure disorder is low among Tennessee public schools, a seizure emergency can be life-threatening, and some students may require administration of a seizure rescue medication, such as Diastat®.

	Percentage
LEAs that call 911 immediately as standard protocol if Diastat® is administered	99%
LEAs that report 911 serves as standard protocol if no nurse or trained staff is available to administer Diastat®	99%
LEAs that permit the administration of Diastat® by a trained volunteer staff member	66%

During the 2019-20 school year, **115** school nurses were assigned to a specific school to serve as a full-time nurse due to an order for emergency seizure medication, a **12%** increase from the 2018-19 school year.

Diabetes

Diabetes is a chronic health condition where the body doesn't make enough insulin, or it can't use insulin the way it should. Federal law gives students the right to receive the diabetes care they need to be safe and participate in school activities just like any other child. Schools provide trained staff to monitor blood glucose levels and administer insulin and glucagon, provide diabetes care during field trips, extracurricular events and all school-sponsored activities, and allow capable students permission to self-manage their diabetes anytime, anywhere.

During the 2019-20 school year, there were **3,366** students with diabetes. Type 1 Diabetes is most common among school-age children. During the 2019-20 school year, **79%** of students with a diabetes diagnosis had type 1 diabetes. School-age children with diabetes are at greater risk for death from acute complications of diabetes, including hypoglycemia and diabetic ketoacidosis (CDC, 2017). Effective management of diabetes can help prevent these acute complications. Hypoglycemia may require the administration of emergency diabetes medication, Glucagon®.

- 69% of LEAs have a policy that allows trained volunteers to administer Glucagon® in schools
- 42,979 staff received training on recognizing hypoglycemic and hyperglycemic events during the 2019-20 school year

Health Services Provided in Tennessee Schools

The most common types of health services provided to students by a licensed health care provider in Tennessee public schools include:

- care of ill/injured students and staff,
- skilled nursing services to students with health needs in general education,
- skilled nursing skills to students with special needs with an Individualized Education Plan (IEP),
- medication administration to students,
- body mass index (BMI) screening, and
- vision, hearing, blood pressure, scoliosis, and dental screenings.

Unlicensed health care providers, also known as unlicensed assistive personnel (UAP), provide many common health services. A UAP is a school volunteer who is trained to function in an assistive role to the registered nurse in the provision of student-related activities or responsibilities. This person is not licensed or governed by a Health Regulatory Board. Unlicensed assistive personnel may only assist students in the self-administration of medications or standby to assist students to do their health care procedure based on the assessment and direction of the registered nurse.

The most common types of health services provided by UAP in Tennessee schools include:

- medication administration,
- vision screenings,
- hearing screenings,
- scoliosis screenings,
- dental screenings, and
- BMI screenings

School Nurses

Tennessee school districts hire nurses to serve the general and special education student populations. During the 2019-20 school year, **1,635** school nurses worked in Tennessee public schools. While **60% of schools** employed a nurse full-time, **53%** of school districts report having at least one school nurse assigned to multiple schools in their district.

During the 2019-20 school year, **12%** of school nurses were assigned to provide care to the special education population only and did not provide care to the general student population.

During the 2019-20 school year, there were **4,191,233** student visits to a school nurse, with **84%** of those students returning to class.

Of the **4,191,233** school nurse visits, **131,625** resulted in a referral to a medical provider. **21%** of students referred to a medical provider were diagnosed with a new chronic illness.

Medications

The purpose of administering medications in school is to help each child maintain an optimal state of health to enhance his or her education. School personnel should limit medication administration to only medications required during school hours and ones that are necessary to provide the student access to the educational program.

All medications, except those designated by an individual healthcare plan (IHP), must be maintained in a secure location under the supervision of a school nurse and/or other school personnel who have been oriented/trained and assigned to handle medications and record-keeping per state guidelines. **20,859** school personnel received training to assist with medication administration.

All public school districts reported that medications were locked in a secure storage location.

Personnel Trained Annually to Administer Medications	Number	Percent of Total
Teachers	11,911	57.10%
Secretaries	3,044	14.59%
Teaching Assistants, Nurse Assistants, School Health Aides	2,274	10.90%
Principals/Assistant Principals	1,346	6.45%
Other	1,331	6.38%
Licensed Practical Nurses (LPNs)	543	2.6%
School Counselors	410	1.97%
Total	20,859	100%

Student Health Screenings

Health-related problems, if not detected and treated, can limit the ability of a child to learn. Healthy students are better learners. Often, the best way to identify these problems is through school health screenings. When a health concern is identified early, through a regular school health screening, schools and families can take steps to ensure students receive access to needed health care, which can improve

education and health outcomes. Every year, parents of Tennessee public school students receive notification from school staff regarding the availability of free student school health screenings for grades K, 2, 4, 6, 8, and one year of high school. (Tennessee Department of Education, 2015).

Type of Health Screening	Number of Students Screened	Number of Students Referred to Health Care Provider	Percentage of Students Screened that were Referred to Health Care Provider
Dental	54,985	12,132	22.06%
BMI	302,251	43,303	14.33%
Vision	318,217	37,168	11.68%
Blood Pressure	290,390	15,301	5.3%
Scoliosis	11,008	449	4.08%
Hearing	322,054	8,159	2.53%
Total	1,298,905	116,512	8.97%

^{*} Dental and Scoliosis screenings are encouraged but not required.

Emergencies

Tennessee law permits certain emergency procedures to be performed by school personnel with appropriate training including, but not limited to, Diazepam Gel, Epinephrine, Glucagon, and Naloxone. During the 2019-20 school year, **17,341** students received emergency treatment.

All public schools must have at least one (1) automated external defibrillator (AED) device placed within the school. During the 2019-20 school year, there were 3,195 AEDs in Tennessee public schools.

Head Injury/ Concussions

98% of all public school districts have adopted guidelines and policies concerning the nature, risk, and symptoms of concussion and head injury.

School nurses protect students from concussion or brain injury by implementing evidence-based concussion prevention and management strategies in the school setting. School nurses also identify students with possible concussion, make referrals, and support students and families when students are ready to return to school. (Spring, 2016).

Cardio-Pulmonary Resuscitation (CPR)

Every public school in the state is encouraged to have at least one employee or volunteer qualified to administer emergency first aid and CPR. During the 2019-20 school year, **24,882** full-time school employees had a certification in CPR. **409** schools provided CPR training to **48,787** students.

Immunizations and Meningococcal Information to Parents

100% of school districts report requiring proof of immunization prior to new student admission to any public school, nursery school, kindergarten, pre-school, or daycare and provide special provisions for homeless children. 100% of school districts reported providing Meningococcal vaccine information to parents/guardians.

School Clinics

School-based health clinics provide health services to meet students' health care needs on a school campus. School-linked health clinics provide health services to students through a variety of linkages such as an external agency providing telehealth. During the 2019-20 school year, **22** school districts had school-based health clinics and **29** school districts had school-linked health clinic.

Conclusion

Health Services are provided and/or supervised by school nurses to appraise, protect and promote the health of students. These services include assessment, planning, coordination of services and direct care for all children, including those with special health care needs. School Health services are designed to ensure early intervention, access and referral to primary health care services, to prevent and control communicable disease and other health problems, and to provide emergency care for student illness and injury.

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